

REMARKS

Claims 1-30 are pending, with claims 1, 8, 11, 21, and 28 being independent. Reconsideration and allowance of the above-referenced application are respectfully requested.

Allowable Subject Matter:

The indication of allowable subject matter in claims 2, 3, 19 and 20 is acknowledged and appreciated. The claims are retained.

Claims 1-10:

Claims 1 and 8 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Murthy (U.S. Patent No. 5,610,905) in view of Wang (U.S. Patent No. 6,708,223). Claims 4, 5, 9, and 10 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Murthy, Wang and an Official Notice in further view of Speight (4<sup>th</sup> USENIX Windows Systems Symposium Paper 2000, pp. 113-124 of the Proceedings, August 3-4, 2000). Claims 6 and 7 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Murthy, Wang, and an Official Notice, in further view of Wipfel (U.S. Patent No. 6,151,688). These contentions are respectfully traversed.

Independent claim 1 recites, "receiving a packet at a proxy node in a system area network from a first node that generated the packet using a first protocol; translating the packet using a second protocol used by a second node; and sending the translated packet from the proxy node to the second node; wherein the first and second protocols comprise first and second transport-layer, connection-oriented, byte stream based protocols, and the proxy node manages first and second endpoints corresponding to the first and second protocols."

Murthy describes a multi-port packet-based bridge in which packet transmissions on particular ports or between ports may be monitored on another, monitoring port. (See Murthy at Abstract and generally throughout.) Murthy has no knowledge of the transport layer of the network stack and has no knowledge of transport endpoints. However, Official Notice is taken that, "it is well known and expected in the networking art to utilize transport-layer, connection-oriented protocols at network nodes."

However, one skilled in the art would not believe that the "protocol translation" mentioned in Murthy could include transport-layer, connection-oriented, byte stream based protocol translation as is being suggested in the Official Action. A bridge, as described in Murthy, is a hardware device that connects two physically distinct network segments. It is a link layer device. The low-level nature of the device described in Murthy is made clear by the two example protocols given in connection with the protocol translation: FDDI (Fiber Distributed Data Interface) and Ethernet. (See Murthy at col. 22, lines 25-38.)

In view of the above, reconsideration of this Official Notice, and the rejections based on this Official Notice, are respectfully requested. In particular, it is respectfully suggested that: (1) there is no motivation in the art of record, or in the knowledge generally available to one of ordinary skill in the art, to use a transport-layer, connection-oriented protocol (such as Transmission Control Protocol (TCP)) as one of the protocols to be translated by the device described in Murthy; and (2) there can be no reasonable expectation of success in the implied combination of TCP with the protocol translation of Murthy in that Murthy describes link-layer protocol translation, which cannot be extended to transport-

layer, connection-oriented, byte stream based protocol translation based on the mere existence of TCP and nothing more.

In view of the above, independent claim 1 should be in condition for allowance.

Independent claim 8 recites, "receiving a packet at a proxy node in a system area network from a first node that generated the packet using a first protocol wherein the packet is addressed to a second node in the system area network that uses a second protocol; processing the packet in the proxy node; and sending a response from the proxy node to the first node using the first protocol, if said processing results in a determination that the packet need not be translated and sent to the second node; wherein the first and second protocols comprise first and second transport-layer, connection-oriented, byte stream based protocols." (Emphasis added.)

Independent claim 8 should be in condition for allowance for at least the reasons addressed above. In addition, claim 8 is patentable over the art of record in view of the conditional sending of the response, which is underlined in the claim language above.

The art of record fails to teach or suggest this claimed feature. In particular, the portion of Murthy cited in the Official Action (col. 20, lines 34-38) is simply describing updating of a table used to figure out, when forwarding packets from one port to another, whether the packets also need to be copied to the monitoring port. This is merely describing a simple technique for determining whether packets come from a port that is being monitored. There is no determination in Murthy of whether or not a packet from a first node needs to be translated and sent to a second node, nor is there any sending of a response from a proxy node to the first node, if the

processing results in a determination that the packet need not be translated and sent to the second node.

Thus, independent claims 1 and 8 should be in condition for allowance. Dependent claims 2-7 and 9-10 are patentable based on the above arguments and their own merits. For example, with respect to claims 6 and 7, there is no motivation to combine Wipfel with Murthy, as addressed in detail below in connection with independent claim 11.

Claims 11-30:

Claims 11-18 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Murthy in view of Wipfel, in further view of an Official Notice. This contention is respectfully traversed.

With respect to the Official Notice, the same points addressed above apply to claims 11-18. Thus, in view of the above, it is respectfully suggested that: (1) there is no motivation in the art of record, or in the knowledge generally available to one of ordinary skill in the art, to use a transport-layer, connection-oriented protocol (such as TCP) as one of the protocols to be translated by the device described in Murthy; and (2) there can be no reasonable expectation of success in the implied combination of TCP with the protocol translation of Murthy in that Murthy describes link-layer protocol translation, which cannot be extended to transport-layer, connection-oriented, byte stream based protocol translation based on the mere existence of TCP and nothing more.

Additionally, the suggested combination of Wipfel with Murthy does not teach or suggest all the claimed features. The art of record fails to teach or suggest the protocol translation as claimed, where translation of a packet between first and second transport-layer, connection-oriented, byte stream based

protocols occurs if the packet meets a specified criterion. The cited portions of Murthy are not describing conditional translation based on per-packet criteria checking, but rather are describing translation from one link-layer protocol to another based on the types of networks attached to the bridge. Thus, all packets bound from a first port to a second port in the device of Murthy will necessarily be translated if the first and second ports connect two networks of different types.

Furthermore, the suggested combination of Wipfel with Murthy does not teach or suggest the features of independent claim 11: "a system area network comprising a network node, a proxy node, and an application node; and a network client; wherein the proxy node comprises a processor configured for: receiving a first packet from the network client through the network node addressed to the application node using a first protocol; and if the first packet meets a specified criterion, translating the first packet using a second protocol used by the application node, and sending the translated first packet to the application node; wherein the first and second protocols comprise first and second transport-layer, connection-oriented, byte stream based protocols."

The Official Action alleges that it would have been obvious "to have implemented a network segment in Murthy as a system area network as defined by Wipfel." However, to the contrary, Wipfel specifically distinguishes a system area network as being quite different from a local area network as described in Murthy. (See Wipfel at col. 1, line 62 to col. 2, line 4.) Thus, Wipfel teaches away from the suggested combination and there is no motivation to combine Wipfel with Murthy. As such this rejection does not meet the patent office's burden of providing a prima facie showing of upatentability.

Moreover, even assuming that the suggested combination could be made, the result of the proposed combination (implementing a network segment in Murthy as a system area network) would not result in the bridge of Murthy (which the Official Action equates with the claimed proxy node) being included within the system area network. Claim 11 recites, "a system area network comprising a network node, a proxy node, and an application node". This claimed feature would not be met even in the proposed combination, which only states that the bridge of Murthy could be attached to a system area network. Therefore, a prima facie case of obviousness has not been established.

In view of the above, independent claim 11 should be in condition for allowance. Dependent claims 12-18 are patentable for at least the above reasons and based on their own merits.

For example, with respect to claim 13, the art of record fails to teach or suggest a proxy node processor that is configured for: (1) if the first packet meets a specified criterion, translating the first packet using a second protocol used by the application node, and sending the translated first packet to the application node; (2) processing the first packet if the first packet does not meet the specified criteria; and (3) sending a response to the network client through the network node using the first protocol, the response being in reply to the first packet if the first packet does not meet the specified criteria.

The Official Action acknowledges that Murthy does not teach or suggest this claimed subject matter, but simply takes Official Notice that, "it is well known and expected in the art to include a failure notification mechanism in a network system to notify a sending client if a packet of data was not properly transmitted to its destination." This statement does not appear

to relate to the claimed subject matter. The claims as written, and the detailed description of the present application have nothing whatsoever to do with a "failure notification mechanism".

Rather, the claimed subject matter relates to per-packet criteria checking in transport-layer protocol translation, where some packets do not need to be translated due to the differences in the two protocols, and where the proxy node is configured to process a packet and send an appropriate response using the first protocol, without translating the packet to the second protocol, if the packet does not meet the specified criteria. The art of record fails to teach or suggest these aspects of the claimed subject matter.

With respect to claims 14-16, the Official Action states that these claims do not teach or further define over the limitations recited in claims 11-13 and are thus rejected for the same reasons. However, these claims clearly define different patentable subject matter from claims 11-13. Claims 14-16 are directed to operations that are performed in connection with a second packet from the application node, in combination with the operations of claim 11 performed in connection with a first packet from the network client. In stark contrast, claims 12-13 are both directed to operations that are performed in connection with the first packet from the network client.

For all of theses reasons, claims 11-18 should be patentable over the art of record.

Claims 21-30 are not subject to any specific rejections in the current Office Action, but rather are simply rejected "for the same reasons as set forth in claims 11-18." Claims 21-30 should also be in condition for allowance for at least the reasons presented above.

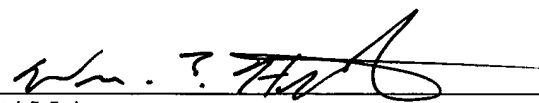
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

It is respectfully suggested for all of these reasons, that the current rejection is totally overcome; that none of the cited art teaches or suggests the features which are now claimed, and therefore that all of these claims should be in condition for allowance. A formal notice of allowance is thus respectfully requested.

No fees are believed due with this response. Please apply any necessary charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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